

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : ADIREDDY et al.  
Serial No. : 09/627,191  
Confirmation No. : 1207  
Filing Date : 07/27/2000  
Group Art Unit : 2611  
Examiner : Pankaj Kumar

**APPEAL BRIEF  
On Appeal from Group Art Unit 2611**

Date: July 19, 2007

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## **I. REAL PARTY IN INTEREST**

The real party in interest is Koninklijke Philips Electronics N.V., the assignee of record.

## **II. RELATED APPEALS AND INTERFERENCES**

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

## **III. STATUS OF CLAIMS**

- a) Claims 1-20 are pending.
- b) Claims 1-9 and 17-20 stand rejected and are the subject of this appeal.
- c) Claims 10-16 are objected to.
- d) Claims 1, 9 and 17 are independent.

## **IV. STATUS OF AMENDMENTS**

The claims listed in section "VIII. Claims Appendix" of this Appeal Brief correspond to the claims as amended and submitted in Appellant's response of November 30, 2006. These amendments were entered by the Examiner. No claim amendments have been submitted following the response of November 30, 2006. Nor are any claim amendments pending.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The claimed invention, as recited in claim 1, is directed to a transmitter (Figs. 1A, 1B, 2; 110 and 160; page 13, line 6 to page 20, line 11) capable of transmitting a stream of known symbols (page 17, lines 5-17) and unknown symbols (page 16, line 20 to page 17, line 7) through

a transmission channel to a first receiver (Fig. 3, 121-123 and 171-173) that receives said transmitted stream of known symbols and unknown symbols distorted by intersymbol interference (ISI) (page 15, line 22 to page 16, line 12), wherein said first receiver (Fig. 3, 121-123 and 171-173) comprises 1) a decision feedback equalizer (Fig. 4, 325; page 20, lines 17-18; page 21, lines 8-21; page 22, line 4 to page 24, line 21) for receiving said stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols and 2) a known symbol generator (Fig. 4, 430; page 22, lines 14-16; page 24, lines 1-21) for generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, said decision feedback equalizer using said copy of said first known symbol to reduce a precursor ISI signal in a second symbol (page 24, lines 8-21), said second symbol being transmitted prior to said first known symbol, wherein the transmitter comprises a known symbol distribution controller (Fig. 2, 215; page 16, lines 16-20; page 17, line 18 to page 18, line 10) capable of inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution.

The claimed invention, as recited in claim 9, is directed to a network (100 & 150, Fig. 1A, 1B, page 13, line 6 to page 16, line 12) comprising: a plurality of receivers (Fig. 3, 121-123 and 171-173; page 20, line 12 to page 22, line 3), each of said receivers capable of receiving from a transmission channel an incoming stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), wherein each of said receivers contains an apparatus for reducing precursor ISI signals (Fig. 4, page 22, line 4 to page 24, line 21); a decision feedback equalizer (Fig. 4, 325; page 20, lines 17-18; page 21, lines 8-21; page 22, line 4 to page 24, line 21) capable of receiving said incoming stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols; a known symbol generator (Fig. 4, 430; page 22, lines 14-16; page 24, lines 1-21) capable of generating a copy of a first

known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, wherein said decision feedback equalizer uses said copy of said first known symbol to reduce a first precursor ISI signal in a second symbol, said second symbol being transmitted prior to said first known symbol (page 24, lines 8-21); and a transmitter capable of transmitting said stream of known symbols and unknown symbols, said transmitter (Fig. 2; page 16, line 13 to page 17, line 9); comprising a known symbol distribution controller (Fig. 2, 215; page 16, lines 16-20; page 17, line 18 to page 18, line 10) capable of inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution.

The claimed invention, as recited in claim 17, is directed to a method of transmitting known symbols and unknown symbols (Fig. 5, page 24, line 22 to page 26, line 3), comprising: providing a transmitter (page 25, lines 1-4; 110 and 160) and a plurality of receivers (page 25, lines 2-4; 121-123 and 171-173) in a network (150), wherein each receiver (Fig. 3, 121-123 and 171-173) receives from a transmission channel an incoming stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), and wherein each receiver comprises: 1) a decision feedback equalizer (Fig. 4, 325; page 20, lines 17-18; page 21, lines 8-21; page 22, line 4 to page 24, line 21) that receives the incoming stream of distorted known symbols and distorted unknown symbols and generates a sequence of detected symbols; and 2) a known symbol generator (Fig. 4, 430; page 22, lines 14-16; page 24, lines 1-21) that generates a copy of a first known symbol prior to an estimation of the first known symbol by the decision feedback equalizer, wherein the decision feedback equalizer uses the copy of the first known symbol to reduce a precursor ISI signal in a second symbol, said second symbol being transmitted prior to the first known symbol (page 24, lines 8-21); inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution (Figs 5, 6 & 7; page 26, line 14 to page 32, line 2); and transmitting the stream of known symbols and unknown

symbols according to the optimum distribution (page 29, line 22 to page 30, line 2; page 31, lines 16-18).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1-8 and 17-20 are properly rejected under 35 U.S.C. 112, first paragraph, as lacking disclosure of the best mode contemplated by the inventor.

Whether claims 1-8 and 17-20 are properly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Whether claims 1-8 and 17-20 are properly rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections.

Whether claim 1 is properly rejected under 35 USC 103(a) as being obvious over Nobakht et al. USPN 5,692,011 (hereinafter Nobakht) in view of Suzuki et al. USPN 5,602,484 (hereinafter Suzuki) and Javerbring USPN 6,269,116.

Whether claims 9 and 17 are properly rejected under 35 USC 103(a) as being obvious over Nobakht in view of Suzuki, Javerbring and Pite USPN 6,167,276.

## **VII. ARGUMENT**

Appellant respectfully traverses the rejections in accordance with the detailed arguments set forth below.

**A. Claims 1-8 and 17-20 are not properly rejected under 35 U.S.C. 112, first paragraph, as lacking disclosure of the best mode contemplated by the inventor.**

The MPEP recites that determining compliance with the best mode requirement requires a two-prong inquiry. First, it must be determined whether, at the time the application was filed, the inventor possessed a best mode for practicing the invention. This is a subjective inquiry which focuses on the inventor's state of mind at the time of filing. Second, if the inventor did possess a best mode, it must be determined whether the written description disclosed the best mode such that a person skilled in the art could practice it. This is an objective inquiry, focusing on the scope of the claimed invention and the level of skill in the art. *Eli Lilly & Co. v. Barr Laboratories Inc.*, 251 F.3d 955, 963, 58 USPQ2d 1865, 1874 (Fed. Cir. 2001).

In the instant application, the Examiner has provided no determination as to either of the two prongs of inquiry as required by the MPEP; there is no inquiry as to the inventor's state of mind at the time of filing. Nor any determination of the scope of the claims and the level of skill in the art. Furthermore, it seems the Examiner is stating that independent claims must recite the best mode. The Examiner states: the evidence of concealment is based upon the independent claims not teaching how parts 1 and 2 of the claims are connected. (Emphasis added).

Appellant respectfully submits there is no requirement that any best mode must be claimed nor that the claims must provide a teaching of the best mode. As pointed out in the MPEP: it must be determined whether the written description disclosed the best mode such that a person skilled in the art could practice it.

It is respectfully submitted the Office has not presented a prima fascia case of concealment of the best mode and the rejection should be reversed.

**B. Claims 1-8 and 17-20 are not properly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The Examiner appears to indicate that claims 1-8 are not clear as to whether they are directed to a transmitter or a receiver.

Appellant respectfully submits claims 1-8 are directed to a transmitter and a receiver. For example claim 1 recites elements of a transmitter and elements of a receiver. Furthermore, Appellant's specification clearly describes several examples of a transmitter or transmitter circuitry and a receiver or receiver circuitry. For example: Figs. 1A & 1B show a transmitter and receiver as separate elements; page 16, lines 13-15 describes that transmitter circuitry can be embodied in both a receiving station and a transmitting station; and page 20, lines 12-14 recites that receiver circuitry can be embodied in both a receiving station and a transmitting station.

Thus, Appellant's claim 1 recites the transmitter and receiver. This is fully supported by the specification and should be quite clear to one skilled in the art. The Examiner has provided no basis for this rejection and it should be reversed.

Furthermore, claims 17-20 are not directed to either of a transmitter or a receiver, but are method claims. Thus, the rejection of claims 17-20 should likewise be reversed.

**C. Claims 1-8 and 17-20 are not properly rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections.**

Referring to paragraph 27, page 9, of the Office Action, it appears the Examiner is arguing that the DFE in the receiver is performing different functions in "part 1" of claim 1 and "part 2" of claim 1 and these functions of the DFE in part 1 do not affect the functions in part 2 and vice versa.

Appellant submits this is incorrect since claim 1 recites: "1) a decision feedback equalizer for receiving said stream of distorted known symbols and distorted unknown symbols and

generating a sequence of detected symbols and 2) a known symbol generator for generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, said decision feedback equalizer using said copy of said first known symbol to reduce a precursor ISI signal in a second symbol, said second symbol being transmitted prior to said first known symbol.” (Emphasis added).

First, it is not clear what the Examiner considers the so-called “part 2 of the claim.” Secondly, “part 2” recites the timing for a symbol generator to generate a copy of a first known symbol. This so-called “part 2 of the claim” is directed to the symbol generator and not the DFE, however the timing of generating a copy is related to when the DFE is estimating a first known symbol, which clearly relates to the “part 1” which recites generating a sequence of detected symbols.

In addition, the claim further recites the DFE using the copy of said first known symbol (it is not clear if this is considered part of the so-called “part 2 of the claim”). Thus, Appellant cannot agree with the Examiner’s contentions. There is no disconnect between the features of the DFE as recited in claims 1 and 17.

Furthermore, the Examiner points to MPEP § 2172.01. Appellant points out this section of the MPEP recites: a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under **35 U.S.C. 112**, second paragraph, for failure to point out and distinctly claim the invention. (Emphasis added).

The Examiner points to this section of the MPEP but fails to point out where in the Appellant’s specification the essential elements are defined as having some differing interrelationship beyond what is claimed.

In addition, Appellant is not aware of any requirement where an element must recite only features which have some “interworking” relationship. The MPEP § 2172.01 recites: A claim

does not necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, are not directly functionally related, do not directly intercooperate, and/or serve independent purposes.

For at least the foregoing reasons it is respectfully requested this rejection be reversed.

**D. Claim 1 is not properly rejected under 35 USC 103(a) as being obvious over Nobakht in view of Suzuki and Javerbring.**

**1. Claim 1**

Appellant's claim 1 includes the feature of: "a decision feedback equalizer for receiving said stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols." This stream of distorted known symbols and distorted unknown symbols is previously defined in the claim.

In the final Office Action (hereinafter OA) under paragraph 30, the examiner alleges that Nobakht discloses a decision feedback equalizer, apparently corresponding to Appellant's feature of claim 1. For such disclosure, the examiner relies on Nobakht's Fig. 6. The Examiner does not point out where in the disclosure these assertions are supported. The Examiner simply states, in paragraph 7 of the OA, that a picture is worth a thousand words. However, a reading of Nobakht's explanation of Fig. 6 (particularly cols. 13 & 14) finds no support for the Examiner's assertions.

Appellant's claim 1 recites receiving distorted known signals and distorted unknown symbols. The Examiner argues that the distorted known signals are received by the input of 603 r(k) (bottom of OA, page 9). However, the Examiner asserts that the claimed decision feedback equalizer is shown in Nobakht's Fig. 6 by 611, 605, 623. Thus, clearly the distorted known signals are not being received by the items 611, 605, 623, which the Examiner considers equivalent to Appellant's decision feedback equalizer. It is received by element 603, which the

Examiner later considers to be the known symbol generator.

At the top of page 10 of the OA the Examiner then argues that known symbols are provided to the alleged decision feedback equalizer by  $rf(k)$  at the input of 605. However, Appellant's claim recites distorted known signals.

Then the Examiner re-uses the same element (675, 613,  $rf(k)$ ) as being equivalent to Appellant's claimed known symbol generator for generating a copy of a first known symbol (top of OA page 10).

Thus, the Examiner is equating  $rf(k)$  as providing the distorted known signals (or non-distorted?) and providing the generated copy of a first known symbol to Appellant's claimed decision feedback equalizer.

In contrast, the actual disclosure in Nobakht, col. 13, teaches that the output of the trainer system 675  $rf(k)$  represents the postcursor ISI imposed by previous symbols on the present received symbol. Furthermore, Nobakht col. 13 states the Trainer System does not use a training sequence.

Appellant's claim recites generating a copy of a first known symbol. Nowhere is this taught in Nobakht. In fact, col. 13 recites that the trainer system 675 uses the received signal sequence,  $r(k)$ , there is no teaching of generating a known symbol sequence.

In addition, Appellant's claim 1 recites: a known symbol generator for generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, said decision feedback equalizer using said copy of said first known symbol to reduce a precursor ISI signal in a second symbol.

On page 10 of the OA, the examiner points to the left input of 605 (it is assumed the Examiner meant the right input). However, Nobakht states this input to 605 is a postcursor ISI imposed by previous symbols on the present received symbol (co. 13, lines 35-37).

It appears the Examiner is simply picking and choosing different elements out of Fig. 6 in order to fit the rejection without considering the references as a whole, and in particular what Nobakht actually teaches, and without considering what one skilled in the art would glean from such a combination of references.

According to the Nobakht's description of Fig. 6 (see Nobakht col. 13), "FIG. 6 shows an overview of one embodiment of the present invention. The present invention is a hybrid equalization system using a Decision Directed Equalization (DDE) section called a trainer system and a modified Decision Feedback Equalization (DFE) section called a trainee system. As is shown in FIG. 6 the output of the trainer system 675,  $r_f$ , is used as input to the FeedBack Filter (FBF) 605 of the trainee system 695. In a typical DFE the output of the decision element is used as input to the FBF. By combining a DFE and a DDE into a single equalizer the present invention achieves significant advantages over prior art equalization techniques. The present invention uses two equalization systems: a trainee system and a trainer system. The trainer system is designed to continuously train the trainee system without the need for training sequences."

Nobakht does not teach or suggest Appellant's feature of "a decision feedback equalizer for receiving said stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols" as recited in claim 1. Furthermore, there is no teaching of the "known symbol generator for generating a copy of a first known symbol..." of claim 1. With respect to other allegations that Nobakht discloses Appellant's features of claim 1, it is respectfully submitted that no portions of the text of Nobakht is cited in the Office Action. Instead, the Examiner interprets Fig. 6 without any support in the patent for the assertions.

With respect to Javerbring, the examiner merely extracted the term ISI and inserted it into Nobakht, while completely disregarding Javerbring and Nobakht as a whole. The Examiner

points to col. 3 of Javerbring as teaching the claimed features as relied upon by the Examiner (see paragraph 8 of the OA). Javerbring merely mentions ISI with absolutely no correspondence to Appellant's features as recited in claim 1.

Similarly, with respect to Suzuki, the Examiner alleged a distribution controller by merely picking disparate elements from the patent to Suzuki, while completely disregarding the patents as a whole.

It is respectfully submitted that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143-§2143.03 for decisions pertinent to each of these criteria.

Analyzing the references according to the above roadmap, first the Examiner offered an unsupported, conclusory remark for the motivation, that "one of ordinary skill in the art ..." on page 10 of the OA. However, Nobakht teaches using a postcursor and no description in Javerbring could be found which suggests precursor ISI was a substitute of postcursor ISI. There is absolutely no motivation or suggestion to combine the references, except on the basis of the impermissible hindsight and knowledge gleaned from Appellant's invention. Picking and choosing elements from various references, while disregarding each reference as a whole, is clearly prohibited by the courts and cannot be sanctioned by the USPTO.

Second, there is no reasonable expectation of success because the prior art references are

not combinable because Nobakht, Javerbring and Suzuki each teach differing systems and one skilled in the art would not have any reasonable expectation of successfully modifying the references as suggested by the Examiner.

Third, Nobakht, Javerbring and Suzuki, even when combined, do not teach all of Appellant's features as recited in claim 1. See the above discussion regarding known symbols and distorted symbols, for example. As argued above, Appellant's features are not taught or suggested in the prior art references, and their combination is deficient in teaching or suggesting all the claim limitations.

Therefore, the cited references fail to render obvious the claimed invention, because the above-identified criteria are not met. The claimed invention, according to claim 1, is thus distinguishable over the cited references and the rejection should be reversed.

**E. Claims 9 and 17 are not properly rejected under 35 USC 103(a) as being obvious over Nobakht in view of Suzuki, Javerbring and Pite.**

The Examiner, on page 12 of the OA, points to the discussion of claim 1 as applying to the rejection of claims 9 and 17. Appellant submits that the analysis of independent claims 9 and 17 is analogous to the one of claim 1, as presented hereinabove. To avoid repetition, Appellant essentially repeats the above arguments from claim 1 without discussing claims 9 and 17 in detail with the understanding that they are patentable at least for the same reasons as claim 1. Appellant, therefore, respectfully submits that, for at least the foregoing reasons, claims 9 and 17 are not rendered obvious by the combination of references and the rejection should be reversed.

**CONCLUSION**

In light of the above, Appellant respectfully submits that the rejection of claims 1-9 and 17-20 is in error, legally and factually, and must be reversed.

Respectfully submitted,

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### **VIII. CLAIMS APPENDIX**

1.(previously presented): A transmitter capable of transmitting a stream of known symbols and unknown symbols through a transmission channel to a first receiver that receives said transmitted stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), wherein said first receiver comprises 1) a decision feedback equalizer for receiving said stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols and 2) a known symbol generator for generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, said decision feedback equalizer using said copy of said first known symbol to reduce a precursor ISI signal in a second symbol, said second symbol being transmitted prior to said first known symbol, wherein the transmitter comprises a known symbol distribution controller capable of inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution.

2.(previously presented): The transmitter as set forth in Claim 1 wherein said known symbol distribution controller is capable of determining a decision delay value associated with said decision feedback equalizer.

3.(previously presented): The transmitter as set forth in Claim 2 wherein said known symbol distribution controller determines said optimum distribution according to the decision delay value.

4.(previously presented): The transmitter as set forth in Claim 3 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to the decision delay value.

5.(previously presented): The transmitter as set forth in Claim 1 wherein said transmitted stream of known symbols and unknown symbols is received by a plurality of receivers similar to said first receiver and wherein said known symbol distribution controller is capable of determining a plurality of decision delay values, wherein each decision delay value is associated with a corresponding decision feedback equalizer in one of said plurality of receivers.

6.(previously presented): The transmitter as set forth in Claim 5 wherein said known symbol distribution controller is capable of determining a maximum decision delay value.

7.(previously presented): The transmitter as set forth in Claim 6 wherein said known symbol distribution controller determines said optimum distribution according to said maximum decision delay value.

8.(previously presented): The transmitter as set forth in Claim 7 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to said maximum decision delay value.

9.(previously presented): A network comprising:

a plurality of receivers, each of said receivers capable of receiving from a transmission channel an incoming stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), wherein each of said receivers contains an apparatus for reducing precursor ISI signals;

a decision feedback equalizer capable of receiving said incoming stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols;

a known symbol generator capable of generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, wherein said decision feedback equalizer uses said copy of said first known symbol to reduce a first precursor ISI signal in a second symbol, said second symbol being transmitted prior to said first known symbol; and

a transmitter capable of transmitting said stream of known symbols and unknown symbols, said transmitter comprising a known symbol distribution controller capable of inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution.

10.(previously presented): The network as set forth in Claim 9 wherein said known symbol distribution controller is capable of determining a first decision delay value associated with a first decision feedback equalizer in said first receiver.

11.(previously presented): The network as set forth in Claim 10 wherein said known symbol distribution controller determines said optimum distribution according to said first decision delay value.

12.(previously presented): The network as set forth in Claim 11 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to said first decision delay value.

13.(previously presented): The network as set forth in Claim 9 wherein said known symbol distribution controller is capable of determining a plurality of decision delay values, wherein each decision delay value is associated with a corresponding decision feedback equalizer.

14.(previously presented): The network as set forth in Claim 13 wherein said known symbol distribution controller is capable of determining a maximum decision delay value.

15.(previously presented): The network as set forth in Claim 14 wherein said known symbol distribution controller determines said optimum distribution according to said maximum decision delay value.

16.(previously presented): The network as set forth in Claim 15 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to said maximum decision delay value.

17.(previously presented): A method of transmitting known symbols and unknown symbols, comprising:

providing a transmitter and a plurality of receivers in a network, wherein each receiver receives from a transmission channel an incoming stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), and wherein each receiver comprises: 1) a decision feedback equalizer that receives the incoming stream of distorted known symbols and distorted unknown symbols and generates a sequence of detected symbols; and 2) a known symbol generator that generates a copy of a first known symbol prior to an estimation of the first known symbol by the decision feedback equalizer, wherein the decision feedback equalizer uses the copy of the first known symbol to reduce a precursor ISI signal in a second symbol, said second symbol being transmitted prior to the first known symbol;

inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution; and

transmitting the stream of known symbols and unknown symbols according to the optimum distribution.

18.(previously presented): The method as set forth in Claim 17, further comprising determining a plurality of decision delay values, wherein each decision delay value is associated with a corresponding decision feedback equalizer; and determining a maximum decision delay value.

19.(previously presented): The method as set forth in Claim 18, further comprising determining the optimum distribution according to the maximum decision delay value.

20.(previously presented): The method as set forth in Claim 19, further comprising separating each inserted known symbol from a nearest inserted known symbol by a distance at least equal to the maximum decision delay value.

**IX. EVIDENCE APPENDIX**

No evidence has been submitted pursuant to §§ 1.130, 1.131, or 1.132 of this title nor any other evidence entered by the examiner and relied upon by appellant in the appeal.

**X. RELATED PROCEEDINGS APPENDIX**

Appellant is not aware of any appeals or interferences related to the present application.